

IN THE CLAIMS

Claim 1 (Currently Amended): A liquid drop discharging head comprising ~~at least one a~~
plurality of ejector [[unit]] units arranged along a main scanning direction, wherein:

each ejector unit includes a first ejector group arranged at one side in the main scanning direction and a second ejector ~~unit~~ group arranged at another side in the main scanning direction[[,]];:

each ejector group includes a plurality of ejectors[[,]];:

all of the ejectors are arranged two-dimensionally in a predetermined plane[[,]];:

each ejector group is formed of ejectors arranged two-dimensionally in the plane;

each ejector includes at least one nozzle[[,]];:

a common passage is provided in each ejector group to supply the ejectors with ink;

~~all of the nozzles are offset from each other in a sub-scanning direction which is substantially perpendicular to the main scanning direction,~~

the nozzles of each ejector group are alternately arranged so that when they are viewed in the main scanning direction, a nozzle of one ejector of the first ejector group[[,]] is followed by a nozzle of one ejector of the second ejector group, and rotates this order along a sub-scanning direction; and

the ejector of each ejector group are disposed such that an imaginary line connecting said ejectors is substantially parallel to the corresponding common passage to supply said ejectors with ink and is inclined at a predetermined angle with respect to the sub-scanning direction a nozzle of another ejector of the first elector group, a nozzle of another ejector of the second ejector group, and so on are arranged in this order along the sub-scanning direction.

Claim 2 (Original): A liquid drop discharging head as claimed in claim 1, further comprising a piezoelectric actuator for discharging a liquid drop.

Claim 3 (Original): A liquid drop discharging head as claimed in claim 1, wherein each nozzle includes a liquid discharge passage, a communication passage, and a liquid discharge port.

Claim 4 (Original): A liquid drop discharging head as claimed in claim 1, wherein each ejector includes a nozzle and a pressure generation chamber.

Claim 5 (Cancelled):

Claim 6 (Original): A liquid drop discharging head as claimed in claim 5, wherein in each of the common passages, one end is closed and another end is connected to one same second common passage.

Claim 7 (Original): A liquid drop discharging head as claimed in claim 6, wherein the second common passage extends parallel to the sub-scanning direction, has one liquid supply port at one end side thereof, and is connected to a liquid supply source through the liquid supply port.

Claim 8 (Original): A liquid drop discharging head as claimed in claim 1, wherein all of the ejectors in each ejector unit together form a sawtooth shape when viewed in a plan view.

Claim 9 (Original): A liquid drop discharging head as claimed in claim 1, wherein all of the ejectors in each ejector unit together form a letter V shape.

Claim 10 (Original): A liquid drop discharging head as claimed in claim 1, wherein in each ejector unit, all of the ejectors of the first ejector group are connected to each other through one common passage and all of the ejectors of the second ejector group are connected to each other through another common passage.

Claim 11 (Original): A liquid drop discharging head as claimed in claim 10, wherein in the one common passage, one end is closed and another end is connected to one second common passage, and wherein in the another common passage, one end is closed and another end is connected to another second common passage.

Claim 12 (Original): A liquid drop discharging head as claimed in claim 11, wherein each of the one second common passage and the another second common passage extends parallel to the sub-scanning direction, has one liquid supply port at one end side thereof, and is connected to a liquid supply source through the liquid supply port.

Claim 13 (Original): A liquid drop discharging head as claimed in claim 11, wherein the one second common passage and the another second common passage are disposed outside of the ejector unit.

Claim 14 (Original): A liquid drop discharging head as claimed in claim 11, wherein the one second common passage and the another second common passage are disposed so as to cross the ejector unit.

Claim 15 (Original): A liquid drop discharging head as claimed in claim 10, wherein in each of the one common passage and the another common passage, one end is closed and another end is connected to one same second common supply passage.

Claim 16 (Original): A liquid drop discharging head as claimed in claim 15, wherein the second common passage extends parallel to the sub-scanning direction, has one liquid supply port at one end side thereof, and is connected to a liquid supply source through the liquid supply port.

Claim 17 (Original): A liquid drop discharging head as claimed in claim 15, wherein the second common passage extends parallel to the sub-scanning direction, has one liquid supply port nearly at a center thereof, and is connected to a liquid supply source through the liquid supply port.

Claim 18 (Currently Amended): A liquid drop discharging device, comprising:

a liquid drop discharging head for applying a liquid drop to an object; [[and]]

a main scanning mechanism for relatively moving the object and the liquid drop discharging head in a main scanning direction,

wherein the liquid drop discharging head includes at least one ejector unit arranged along the main scanning direction[[,]]:

each ejector unit including a first ejector group arranged at one side in the main scanning direction and a second ejector group arranged at another side in the main scanning direction[[,]];

each ejector group includes a plurality of ejectors[[,]];

all of the ejectors are arranged two-dimensionally in a predetermined plane[[,]];

each ejector includes one nozzle[[,]];

all of the nozzles are offset from each other in a sub-scanning direction which is substantially perpendicular to the main scanning direction[[,]]; and

the nozzles of each ejector group are alternately arranged so that when they are viewed in the main scanning direction, a nozzle of one ejector of the first ejector group, a nozzle of one ejector of the second ejector group, a nozzle of one ejector of the second ejector group, a nozzle of another ejector of the first ejector group, a nozzle of another ejector of the second ejector group, and so on are arranged in this order along the sub-scanning direction.

Claim 19 (Original): A liquid drop discharging device as claimed in claim 18, further comprising a sub-scanning mechanism for relatively moving the object and the liquid drop discharging head in the sub-scanning direction.

Claim 20 (Original): A liquid drop discharging device as claimed in claim 18, further comprising a piezoelectric actuator for discharging a liquid drop.

Claim 21 (New): A liquid drop discharging head comprising a plurality of ejector units arranged along a main scanning direction, wherein:

each ejector unit includes a first ejector group arranged at one side in the main scanning direction and a second ejector group arranged at another side in the main scanning direction;

each ejector group includes a plurality of ejectors;

all of the ejectors are arranged two-dimensionally in a predetermined plane;

each ejector group is formed by ejectors arranged two-dimensionally in the plane;

each ejector includes at least one nozzle;

the nozzle of each ejector group are alternately arranged so that when they are viewed in the main scanning direction, a nozzle of one ejector of the first ejector group is followed by a nozzle of one ejector of the second ejector group, and rotates this order along a sub-scanning direction;

a first imaginary line connecting the ejectors of the first ejector group is inclined at a first angle with respect to the sub-scanning direction;

a second imaginary line connecting the ejectors of the second ejector group is inclined at a second angle with respect to the sub-scanning direction; and

said first angle and said second angle are substantially the same.